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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/534,262 03/24/00 HATA

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EXAMINER

WENDEROTH LIND & PONACK LLP
2033 K STREET N W
SUITE 800
WASHINGTON DC 20006

CHANG, R

ART UNIT

PAPER NUMBER

3729

DATE MAILED: 04/03/01

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/534,262

Applicant(s)

HATA ET AL.

Examiner

Rick K. Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 18) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 16-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16: the meets and bounds of "a stick-shaped" and "a tray-shaped" are not clearly defined.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker (US 5,323,528) in view of Asai et al (US 5,711,065), and further in view of Mori et al (US 5,456,001).

Baker discloses a plurality of component supply tables (27) accommodating a plurality of components arranged opposite sides of a board mounting position (Fig. 5) and substantially all the claimed limitations, except for the component supply tables are moved by casters, a stick-shaped component supply means at which components stored in a pipe member, and bulk components. It would have been obvious to provide

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bulk components to the Baker's apparatus to mount various types of components on the printed circuit boards. Baker discloses the third direction is parallel to the first direction (nozzles moving up and down to mount components), and the fourth direction is parallel to the second direction (nozzle moving along 63), but is not necessarily the same direction as the second direction (71 and 73 move in opposite directions along 63).

Asai discloses the component supply tables are moved by casters (296) thereby readily exchanging one tray component supply table to another tray component supply table to replenish depleted components.

Mori discloses a stick-shaped component supply means (where 57 lies) at which components stored in a pipe member (15 and 16) thereby supplying disoriented components one by one to the supply position.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Baker by providing casters to the component supply tables as taught by Asai thereby readily exchanging one tray component supply table to another tray component supply table to replenish depleted components.

Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Baker by providing a stick-shaped component supply means at which components stored in a pipe member as taught by Mori thereby supplying disoriented components one by one to the supply position.

5. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baker (US 5,323,528) in view of Asai et al (US 5,711,065), and further in view of Onodera (US 5,741,114).

Baker discloses a plurality of component supply tables (27) accommodating a plurality of components arranged opposite sides of a board mounting position (Fig. 5) and substantially all the claimed limitations, except for the component supply tables are moved by casters, and a pair of inverted U-shaped support frames positioned on the base structure in a parallel relationship and on opposite sides of a board mounting position, wherein a board transfer path extends through openings in the U-shaped support frames. Baker discloses the third direction is parallel to the first direction (nozzles moving up and down to mount components), and the fourth direction is parallel to the second direction (nozzle moving along 63), but is not necessarily the same direction as the second direction (71 and 73 move in opposite directions along 63).

Asai discloses the component supply tables are moved by casters (296) thereby readily exchanging one tray component supply table to another tray component supply table to replenish depleted components.

Onodera discloses a pair of inverted U-shaped support frames positioned on the base structure in a parallel relationship and on opposite sides of a board mounting position, wherein a board transfer path extends through openings in the U-shaped support frames (see annotated Figs. 1-2) thereby providing strong and rigid upper gantry structure.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Baker by providing casters to the component supply

tables as taught by Asai thereby readily exchanging one tray component supply table to another tray component supply table to replenish depleted components.

Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Baker by providing a pair of inverted U-shaped support frames positioned on the base structure in a parallel relationship and on opposite sides of a board mounting position, wherein a board transfer path extends through openings in the U-shaped support frames thereby providing strong and rigid upper gantry structure.

Response to Arguments

6. Applicant's arguments filed 2/16/2001 have been fully considered but they are not persuasive.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "a stick-shaped component supply means, cassettes, reels, a pipe member, bulk components" limitations must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Brief descriptions disclose in the specification is not the same as showing every feature of the invention.

Re 112 rejection, the examiner does not understand what is meant by stick-shaped or tray-shaped. The drawings are insufficient to convey these features to one of ordinary skill in the art.

Re having the component tables being moved, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Baker by

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providing casters to the component supply tables as taught by Asai thereby readily exchanging one tray component supply table to another tray component supply table to replenish depleted components.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., Mori fails to disclose or suggest . . . mounting operations) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion


7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick K. Chang whose telephone number is 703-308-4784. The examiner can normally be reached on M-F, 5:30 a.m.-1:30 p.m. (EST).

RC
March 29, 2001



Allan N. Shoap
Supervisory Patent Examiner
Group 3700